ABSTRACT OF THE DISCLOSURE

An implantable heart stimulator and related method calls for the determination of a given heart condition from among a plurality of conditions, the selection of at least one mode of operation for treating the determined condition, and the execution of the mode of operation selected, so as to treat the determined condition. In one embodiment of the invention, wherein a plurality of modes of operation for treating the various conditions are provided, the implantable heart stimulator includes dual processors, each processor being designed to efficiently execute a respective group of modes of operation. A further embodiment of the present invention calls for the implantable heart stimulator to be implemented by at least one programmable microprocessor. A still further embodiment calls for the provision of a data input/output channel, by means of which data can be provided to and retrieved from the implantable heart stimulator. Operations carried out by the implantable heart stimulator include cardiac pacing, cardioversion, and automatic defibrillation. In a further embodiment of the implantable heart stimulator and related method, sensing circuitry is provided to determine the presence or absence of an R-wave of the heart, the absence of which causes a pacing operation to be implemented, further sensing circuitry being provided to determine the presence or absence of a forced R-wave of the heart, the absence of a forced R-wave causing ventricular defibrillation to be implemented.